IN THE CLAIMS:

Please amend Claim 1 and add Claims 16-18 as follows.

1. (Currently Amended) A diffractive optical element, comprising:

a grating structure having a periodic first blazed type grating portion and a periodic second blazed type grating portion which is arranged on a light exit side of the first blazed type grating portion, wherein

in at least one of the first blazed type grating portion and the second blazed type grating portion having a period larger than a used wavelength, period grating section structures smaller than [[a]] the used wavelength are arranged in a periodic manner.

2. (Original) A diffractive optical element according to claim 1, wherein said diffractive optical element is structured such that within an entire region of used wavelengths, diffraction directions are made different from each other, depending upon a polarization direction of a light beam incident on said diffractive optical element, and a diffracted light is concentrated only to one predetermined diffraction order.

3. (Original) A diffractive optical element according to claim 1, wherein said minute periodic structure is constituted by one kind of material, or two kinds of materials, and occupation ratios of the respective materials within one period of said minute periodic structure are made different from each other along a periodic direction of said grating portion.

4. (Original) A diffractive optical element according to claim 1, wherein said diffractive optical element has a step-shaped grating portion.

5. (Previously Presented) A diffractive optical element according to claim 4, wherein said minute periodic structure of said grating portion is varied along a periodic direction of said grating portion.

6. (Previously Presented) A diffractive optical element according to claim 5, wherein said minute periodic structure varied along the periodic direction of said grating portion is varied every step of said step-shaped grating portions.

7. (Previously Presented) A diffractive optical element according to claim 4, wherein said minute periodic structure of said grating portion is varied in a grating thickness direction.

8. (Previously Presented) A diffractive optical element according to claim 7, wherein said minute periodic structure varied in the grating thickness direction is varied every step of said step-shaped grating portion.

9. (Original) A diffractive optical element according to claim 1, wherein said used wavelength range corresponds to a visible light range.

10. (Previously Presented) A polarization converting element, comprising deflecting means provided so that an emergence direction of one of a P-polarized light beam and an S-polarized light beam which has undergone polarization-separation to be diffracted in a diffraction direction different depending on a polarization direction by said diffractive optical element according to claim 2 is made substantially coincident with an emergence direction of the other beam.

11. (Previously Presented) A polarization converting element, comprising a half-wave plate provided in correspondence to one of a P-polarized light beam and an S-polarized light beam, which has undergone polarization-separation to be diffracted in a direction different depending upon polarization direction, by said diffractive optical element according to claim 2.

12. (Previously Presented) A polarization converting element, comprising deflecting means provided so that an emergence direction of one of a P-polarized light beam and an S-polarized light beam which has undergone polarization-separation to be diffracted in a diffraction direction different depending on a polarization direction by said diffractive optical element according to claim 2 is made substantially coincident with an emergence direction of the other beam and a half-wave plate is provided in correspondence to one of the P-polarized light beam and S-polarized light beam.

13. (Previously Presented) A polarization converting element according to any one of claims 10 to 12, further comprising an optical member provided so that an incident

direction of a light beam on said diffractive optical element is made substantially parallel to an emergence direction thereof.

14. (Original) A projection type display apparatus, in which a light beam which is emitted from a light source unit and contains an S-polarized light component and a P-polarized light component, is guided using the polarization converting element according to any one of claims 10 to 12 toward modulating means for modulating the light beam on the basis of an image signal and the light beam modulated by said modulating means is projected onto a predetermined surface by a projection optical system.

15. (Original) A projection type display apparatus according to claim 14, wherein said image signal is controlled in response to a signal supplied from an image processing means.

16. (New) A diffractive optical element according to claim 1, wherein corresponding grating sections of said first and second blazed type grating portions have the same period.

17. (New) A diffractive optical element according to claim 1, wherein a period of the periodic structure, which is smaller than the used wavelength, is smaller than a period of the grating sections of the first and second blazed type grating portions.

18. (New) A diffractive optical element according to claim 1, wherein the periodic structure, having a period smaller than the used wavelength, is a rib-like sub-wavelength structure of various depth.